

stated the FHWA has a web site that provides guidelines for addressing cumulative impacts; this might be a good starting point.

Presentation of Conceptual Mitigation Projects

- Mr. Murray presented the mitigation sites and options listed in the meeting handout. Each of the 17 sites was discussed in detail. Some of the mitigation could be provided on Airport property, but the most promising opportunities would be on the land north of the Airport.
- The Study identified the best opportunities for mitigation on the land north of the Airport that is either owned or leased by the City of Key West; including, the old blimp pads and remnant runways, the area being used by the City as a stockpile site for excavated material, and the abandoned Hawk Missile Site. However, this would require considerable coordination with the City.
- ACOE stated the farther removed the proposed mitigation is from the Airport the higher the mitigation ratios could become.
- Mr. Murray presented the concept of acquisition and preservation of private property. SFWMD stated this might be considered as an option; probably at a 20:1 ratio. This could be a component of the total mitigation package; would need a Management Plan and a Conservation Easement. NMFS stated it would be a last resort option for them.

Discussion of Mitigation Strategies

- The Cow Key Site: SFWMD believes the City tried to obtain that parcel for mitigation but could not come to a resolution with the owner. URS should investigate. The ACOE expressed concern about releasing degraded water once the fill was removed, thereby lowering water quality in the adjacent wetlands.
- The North Boca Chica Site: ACOE indicated this site may be problematic due to land costs and access.
- The Key Deer Site: ACOE was in favor of the proposed road removal.
- The Key Deer Refuge Borrow Pit Site: SFWMD indicated some of this property may already be under construction as a mitigation site.
- ACOE listed some of the commenting agencies that may affect the permitting process: the Environmental Protection Agency (EPA), the NMFS, the Florida Department of Community Affairs (DCA) through the Florida Department of Environmental Protection (FDEP) for Coastal Zone Consistency, and the City of Key West.

Conclusions

- URS is expecting to complete the Study by the end of March.

- FAA will review the document and make a determination as to the feasibility of a standard RSA.
- FAA indicated the next step might be the NEPA process; an Environmental Assessment or possibly a full Environmental Impact Statement, and/or the submittal of a permit application.

END OF MINUTES

TABLE 2
SUMMARY OF POTENTIAL MITIGATION SITES
KEY WEST INTERNATIONAL AIRPORT
RSA IMPROVEMENTS

Site Name	Acres of Potential Wetland Creation	Acres of Potential Wetland Enhancement
Key West		
1. Airport Property Restoration	7.0	0
2. City of Key West Property Restoration	11.2	0
Stock Island		
3. Cow Key Road Removal	5.6	0
Boca Chica		
4. North Boca Chica Restoration	40.0	15.0
Sugarloaf Keys		
5. USFWS Key Deer Refuge Road Removal	1.5	0
6. Sugarloaf loop road removal and limestone quarry restoration	7.4	0
Summerland Key		
7. Summerland Key Bridge Removal	.08	.07
Cudjoe Key		
8. Cudjoe Key Limestone Mine Restoration	8.0	10.0
9. Cudjoe Key Canal Restoration	0.7	0.05
10. Spain Boulevard Culverts and Fill Removal	0.4	23.0
11. Deer Refuge Dredge Hole Restoration	0.8	0.5
Middle Torch Key		
12. Finger Fill Removal	0.3	0
13. Habitat for Humanity Dump Site Restoration	5.2	0
Big Pine Key		
14. Western Big Pine Dredge Hole Restoration	2.4	0.5
15. Key Deer Refuge Borrow Pit Restoration	3.8	0
No Name Key		
16. No Name Key Limestone Pit Restoration	4.3	5.3
Ohio Key		
17. Ohio Key Mangrove Restoration	4.1	0
Total Acreage	103	54



Meeting Documentation

Project: Key West International Airport – Runway Safety Area (RSA)
Feasibility Study

Meeting Date: January 31, 2003

Meeting Location: Key West International Airport
City of Key West, Florida

Attendees: Mr. Ron Peekstok, SFWMD
Mr. Rob Robbins, SFWMD
Mr. Peter Horton, KWIA
Mr. George G. Feher, URS Corporation / Tampa

Authored By: George G. Feher, Sr. Environmental Scientist

Subject: Field review of proposed RSA site

Distribution: Project Files

The following is a summary of topics discussed:

- District personnel and myself field-reviewed the entire area where the proposed RSA footprint would be located; traveling first to the eastern end of the runway, then along the northern portion, and finally investigating the western approach, the salt ponds and the bunker location.
- Mr. Feher explained the rationale for URS's ranking the various habitats as being of High, Medium or Low quality; that those terms will be used in the RSA Feasibility Study.
- District personnel acknowledged the rationale but will withhold final judgment as to acceptance until they had a chance to study the project in more detail.

END OF MINUTES



Meeting Documentation

Project: Key West International Airport – Runway Safety Area (RSA)
Feasibility Study

Meeting Date: January 29, 2003

Meeting Location: Office of the City Engineer
City of Key West, Florida

Attendees: Ms. Annalise Mannix-Lachner, P.E. (Manager Engineering Services)
Mr. George G. Feher, URS Corporation / Tampa

Authored By: George G. Feher, Sr. Environmental Scientist

Subject: Mitigation opportunities on City owned land.

Distribution: Project Files

The following is a summary of topics discussed:

- Mr. Feher opened the meeting with a brief overview of the Study and the need to find mitigation land for approximately 31 acres of anticipated wetland impacts; primarily for mangroves, salt ponds and herbaceous wetlands. The Study is seeking primarily impacted uplands that could be converted to the above mentioned wetland habitats.
- Mr. Feher indicated the Study sees considerable opportunities for mitigation on the land north of the Airport; the old blimp pads and remnant runways, including the area being used by the City as a stockpile site for excavated material and the abandoned Hawk Missile Site.
- Ms. Mannix-Lachner indicated that the land north of the Airport - where the abandoned blimp pad and runway is located - is owned by the City and that the City has plans to use it for recreational development. It is not available for wetland mitigation.
- Ms. Mannix-Lachner stated the City would be more interested in having the existing stormwater systems improved and cleaning out retention ponds to improve water quality in the City. These include outfall improvements to Riviera canal and many other canals, various canal maintenance dredging projects, dredging of the MacDonald Ave. pond, and dredging Garrison Bight to remove built up sediment, to name a few.



Meeting Documentation

Project: Key West International Airport – Runway Safety Area (RSA)
Feasibility Study

Meeting Date: January 31, 2003

Meeting Location: Office of Monroe County Land Authority
City of Key West, Florida

Attendees: Mr. Mark Rosch, Executive Director, Monroe County Land Authority
Mr. George G. Feher, URS Corporation / Tampa

Authored By: George G. Feher, Sr. Environmental Scientist

Subject: Mitigation opportunities on County owned land.

Distribution: Project Files

The following is a summary of topics discussed:

- Mr. Feher opened the meeting with a brief overview of the Study and the need to find mitigation land for approximately 31 acres of anticipated wetland impacts; primarily for mangroves, salt ponds and herbaceous wetlands. The Study is seeking primarily impacted uplands that could be converted to the above mentioned wetland habitats.
- Mr. Rosch discussed the following sites:
 - The Cow Key property I indicated is in private ownership,
 - The Berg property was recently acquired by the City next to 1800 Atlantic Ave. condos. There may be some opportunities there; discuss with the City,
 - The George Deviglous (sp?) property was also acquired by the City,
 - The Chetkin (sp?) property on Big Pine Key has about 2 acres that could be scraped down, and
 - Summerland Key at MM 25 has a piece of county land that is being looked at by a private entity for mitigation.

In addition we should contact Laurie McHargue with the County on Plantation Key for additional information (305) 852-7112.

END OF MINUTES



Meeting Documentation

Project: Key West International Airport – Runway Safety Area (RSA)
Feasibility Study

Meeting Date: January 29, 2003

Meeting Location: Office of the Assistant City Manager
City of Key West, Florida

Attendees: Mr. John Jones, Assistant City Manager
Mr. Ty Symroski, City Planner
Mr. George G. Feher, URS Corporation / Tampa

Authored By: George G. Feher, Sr. Environmental Scientist

Subject: Mitigation opportunities on City owned land.

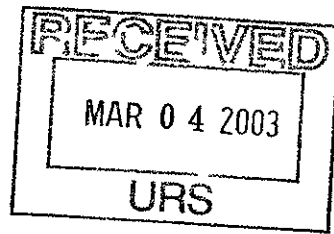
Distribution: Project Files

The following is a summary of topics discussed:

- Mr. Feher opened the meeting with a brief overview of the Study and the need to find mitigation land for approximately 31 acres of anticipated wetland impacts; primarily for mangroves, salt ponds and herbaceous wetlands. The Study is seeking primarily impacted uplands that could be converted to the above mentioned wetland habitats.
- Mr. Jones indicated the City's desire to cooperate with the Airport; he also invited Mr. Ty Symroski (City Planner) and Ms. Annalise Mannix-Lachner (Manager Engineering Services) to attend. Ms. Mannix-Lachner could not attend, but a meeting was scheduled with her for later that day.
- Mr. Feher indicated the Study sees considerable opportunities for mitigation on the land north of the Airport; including the old blimp pads and remnant runways, the area being used by the City as a stockpile site for excavated material and the abandoned Hawk Missile Site.
- Mr. Symroski stated his opinion that the City had lost a considerable area of upland habitat to development and it should retain as much of existing upland habitat as possible. Consequently, he is not in favor of converting the remaining uplands into wetlands. In his opinion the City should concentrate on an "ecosystem" approach to restoration of upland and freshwater wetlands. In addition, improving the existing stormwater systems and cleaning out retention ponds should be pursued.

- Mr. Symroski indicated that the land north of the Airport - where the abandoned blimp pad and runway is located - is owned by the City and that the City has plans to use it as a "passive park". He also stated that the abandoned Hawk Missile Site conveyed by the Navy to the City should be retained as a historical landmark representing the "coastal defenses of the cold war". It should not be removed for wetland mitigation.
- Mr. Feher inquired as to the lift station located south of Government Rd.; Mr. Jones indicated it is a functioning system (recently repaired) and can not be removed to create wetlands.
- Mr. Symroski indicated he has a number of stormwater improvement projects in mind and would provide URS a map with their locations.

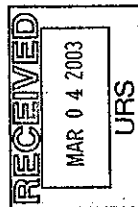
END OF MINUTES



Please make
a copy for
George
Thanks.

Ty

Dianne,
please send to Peter!
Horton at the KW airport!
I have him send it
to George Baker
Thanks
Ty



Accelerate installation of a wide variety of native trees & shrubs in public space such as Flagline medians, Pointe du Housay & Former Navy land at Truman water front.

Check T-10-11
remove on asphalt... build
convert back to botanical
gardens & hammock.
- Add native trees & shrubs
to K&W Golf Course.

Ideas for
Key Wests Ecological
Enhancement
To
City Planner
Jan. 30, 2003

CHRISTMAS
TREE ISLAND

Rip rap habitat
along seawall
silt & garbage
removal

Rip rap
habitat at
seawall

Remove silt
if polluted
At minimum
remove garbage
along pond

Rip rap seawall
to create habitat
are store dredged
debris

provide stormwater
management into
pond, remove polluted
silt, create ~~new~~ reconnected
isolated wetlands

Relocate Little
Hammock property lot
to Govt road right
of way to restore
habitat.

provide flow
into middle
side bay ponds
but retain
historic
site.
Restore
adjacent
scattered
areas

Haulow Row
drainaged area
Restore original
profile at house
boat Row.

Add native trees &
shrubs now that
invasives have been
removed. Include fresh
water spots
Enhance flows

enhance flow
into existing low
area ~~water~~

provide upland
habitat & fresh
water spot habitats
in fill area

Remove debris
from Riviera Canal
& Salt Run canal
& fill to bring
depth to 5' MLW
& plant mangroves

Facilitate replacement
of Australian Pine
with Native trees & shrubs

Note: There are many stormwater
management projects to construct
for K&W stormwater plan such
as vicinity of Atlantic Blvd. &
Key West Blvd, Garrison Blvd &
N. Roosevelt.





Meeting Documentation

Project: Key West International Airport – Runway Safety Area (RSA)
Feasibility Study

Meeting Date: October 17, 2002

Meeting Location: Key West International Airport
City of Key West, Florida

Attendees: Mr. Andrew G. Gude, US Fish and Wildlife Service
Mr. George G. Feher, URS Corporation / Tampa

Authored By: George G. Feher, Sr. Environmental Scientist

Subject: Field review of proposed RSA site

Distribution: Project Files

The following is a summary of topics discussed:

- Mr. Gude and myself field-reviewed the entire area where the proposed RSA footprint would be located; traveling first to the eastern end of the runway, then along the northern portion, and finally investigating the western approach, the salt ponds and the bunker location.
- Although Mr. Gude did not think the site contained habitat of suitably high quality for either the rice rat or the marsh rabbit, he did indicate that a more qualified expert specializing in these species would have to review the area.
- He also mentioned that feral cats living wild in such habitats usually decimate such populations.

END OF MINUTES

URS CORPORATION

RECORD OF CONVERSATION

DATE:	1/16/03	JOB NO:	12637802.00001
RECORDED BY:	Ted Murray	OWNER CLIENT:	Monroe County
TALKED WITH:	Jeannette Hobb	OF:	Florida Keys Restoration TF
NATURE OF CALL:	INCOMING 9	OUTGOING 9	MEETING 9

ROUTE TO:	INFORMATION	ACTION
-----------	-------------	--------

SUBJECT OF CONVERSATION: Potential Mitigation Sites In the Lower Keys

ITEMS DISCUSSED:

The project at KWIA was described and Jeannette was asked if she had a list of potential mitigation projects in the lower Keys. She stated that she did not maintain a list, however she referred to the "Sugarloaf School Mitigation Options" document as a list of potential projects. The list was reviewed with her and the completed projects were deleted from the list. She indicated that there were few saltwater restoration and/or creation projects available in the lower Keys and that most of these types of projects were found in the upper Keys. She indicated that Chris Burgh of the Nature Conservancy and Phil Frank of the Key Deer Refuge would be good contracts to explore additional projects.

URS CORPORATION

RECORD OF CONVERSATION

DATE:	1/23/03	JOB No:	12637802.00001
RECORDED BY:	Ted Murray	OWNER CLIENT:	Monroe County
TALKED WITH:	Randy Grau	OF:	FFWCC
NATURE OF CALL:	INCOMING 9	OUTGOING 9	MEETING 9

ROUTE TO:	INFORMATION	ACTION
-----------	-------------	--------

SUBJECT OF CONVERSATION: MITIGATION OPTIONS IN THE LOWER KEYS

ITEMS DISCUSSED:

Mr. Grau stated that the Commission does not have any potential mitigation/enhancement projects that would meet our needs. He indicated that there is a road on Cow Key that could be removed to restore a mangrove area. He indicated that the road was currently under private ownership.

URS CORPORATION

RECORD OF CONVERSATION

DATE:	1/23/03	JOB NO:	12637802.00001
RECORDED BY:	Ted Murray	OWNER CLIENT:	Monroe County
TALKED WITH:	Chris Burgh	OF:	Nature Conservancy
NATURE OF CALL:	INCOMING 9	OUTGOING 9	MEETING 9

ROUTE TO:

INFORMATION

ACTION

SUBJECT OF CONVERSATION: MITIGATION OPPORTUNITIES IN THE LOWER KEYS

ITEMS DISCUSSED:

Mr. Burgh stated that he deals primarily with invasive species issues and that there were limited opportunities in the area since most invasive problems were associated with upland or freshwater wetlands. Potential projects that he was familiar with included placing culverts beneath Watson and Key Deer Blvds on Big Pine to enhance tidal flushing, he also indicated that a small Nature Conservancy property on Big Pine could use restoration. He indicated that the old US 1 property on Saddlebunch Key may be an alternative for road removal, however USFWS would like to retain portion of the road for hiking and bike access. He suggested contacting Phil Frank with the Key Deer Refuge for more information.

Mr. Burgh called back later with two other potential projects. First would be approximately 2 acres of invasive species removal on Stock Island near the hospital and landfill, and secondly was the removal of a berm near the County Jail to enhance flushing of the area. He also suggested contacting Randy Grau with the Fish and Wildlife Conservation Commission.

URS CORPORATION

RECORD OF CONVERSATION

DATE:	1/24/03	JOB No:	12637802.00001
RECORDED BY:	Ted Murray	OWNER CLIENT:	Monroe County
TALKED WITH:	Phil Frank	OF:	Key Deer Refuge
NATURE OF CALL:	INCOMING 9	OUTGOING 9	MEETING 9

ROUTE TO:	INFORMATION	ACTION
-----------	-------------	--------

SUBJECT OF CONVERSATION: MITIGATION OPPORTUNITIES ON KEY DEER REFUGE
PROPERTY

ITEMS DISCUSSED:

Mr. Frank stated that there was some opportunity to perform mitigation on property within the refuge boundary. He indicated that prior to committing refuge property he would need permission from USFWS. He indicated that he has about 5 acres of disturbed upland that can be converted to wetland. He also indicated that there is 40 acres on Cudjoe Key that is owned by the City of Key West that could be restored and enhanced.

Mr. Frank also stated that there are numerous wetland properties that the refuge would like to acquire and manage and volunteered to contact SFWMD to determine if they would accept this type of acquisition as mitigation.

A meeting at the refuge was set for Friday, January 31, 2003 to discuss mitigation opportunities on refuge property.

- Ms. Mannix-Lachner provided Mr. Feher a copy of the City's Master Drainage Plan.

END OF MINUTES



January 13, 2003

Mr. Scott Edwards
Florida Division of Historical Resources
500 S. Bronough Street
Tallahassee, Florida 32399-0250

**RE: FEASIBILITY STUDY
RUNWAY SAFETY AREA IMPROVEMENTS
KEY WEST INTERNATIONAL AIRPORT
MONROE COUNTY, FLORIDA**

Dear Mr. Edwards:

As discussed, the Federal Aviation Administration and Monroe County Board of County Commissioners are preparing a study to determine the feasibility of providing a standard Runway Safety Area (RSA) at the Key West International Airport. The RSA is critical for passenger safety in its function to support aircraft in the event of an overrun or short landing on a runway. The RSA is typically a level grassed area surrounding a runway.

The goal of the feasibility study is to identify the issues and likely mitigation requirements associated with implementing the standard RSA at the airport. The RSA project would involve an abandoned military bunker on property that had been transferred from the US Department of Defense to the County for airport use. The deed transferring the property includes reference to the bunker being eligible for listing in the National Register of Historic Places. The bunker, part of a Cold War-era missile site, would be affected by construction and proposed mitigation if the standard RSA was implemented. I have enclosed a diagram showing the location of the bunker, information on the RSA project, and photographs of the bunker's exterior and interior. Note that the missile launch pads and associated fill material have been removed.

We would appreciate your preliminary opinion as to the probable importance of the structure in regards to eligibility status and what would likely be required for documentation, coordination, or mitigation if the bunker was to be affected or removed as part of the proposed RSA project.

If the decision is made to pursue the standard RSA, the FAA will initiate detailed environmental studies and coordination on this matter under the National Environmental Policy Act.

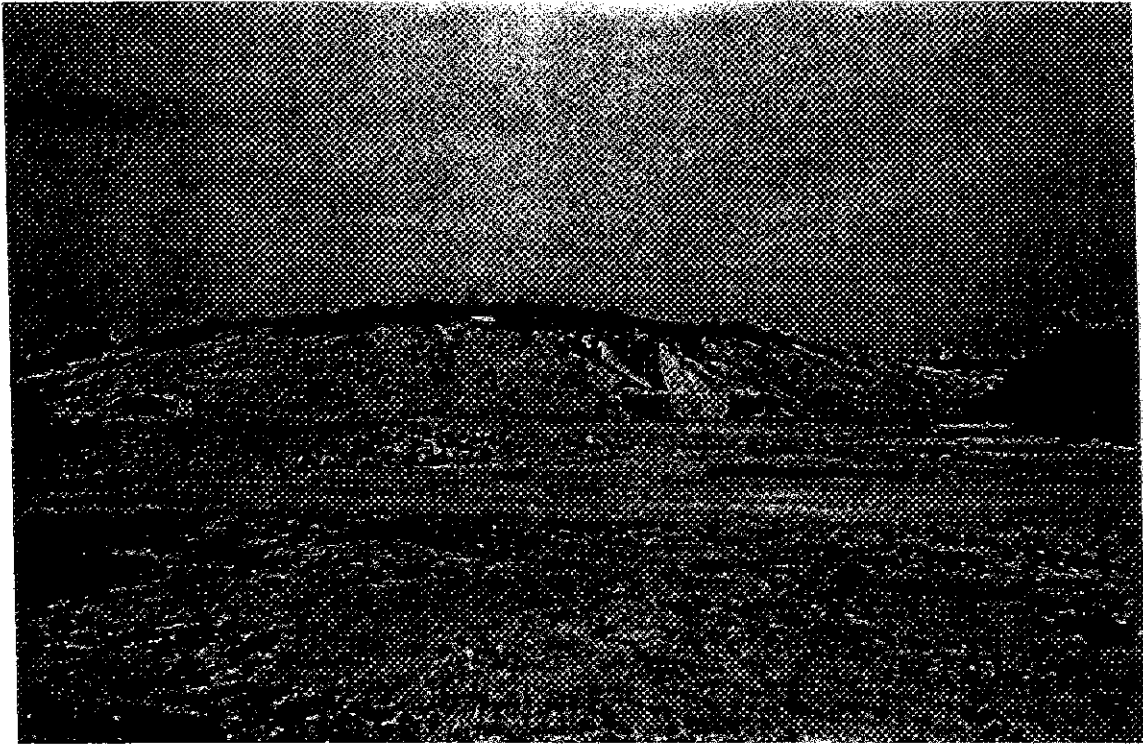
We appreciate your input on this very important public safety matter. Please call me at (813) 675-6556 if you have any questions or need additional information.

Sincerely,

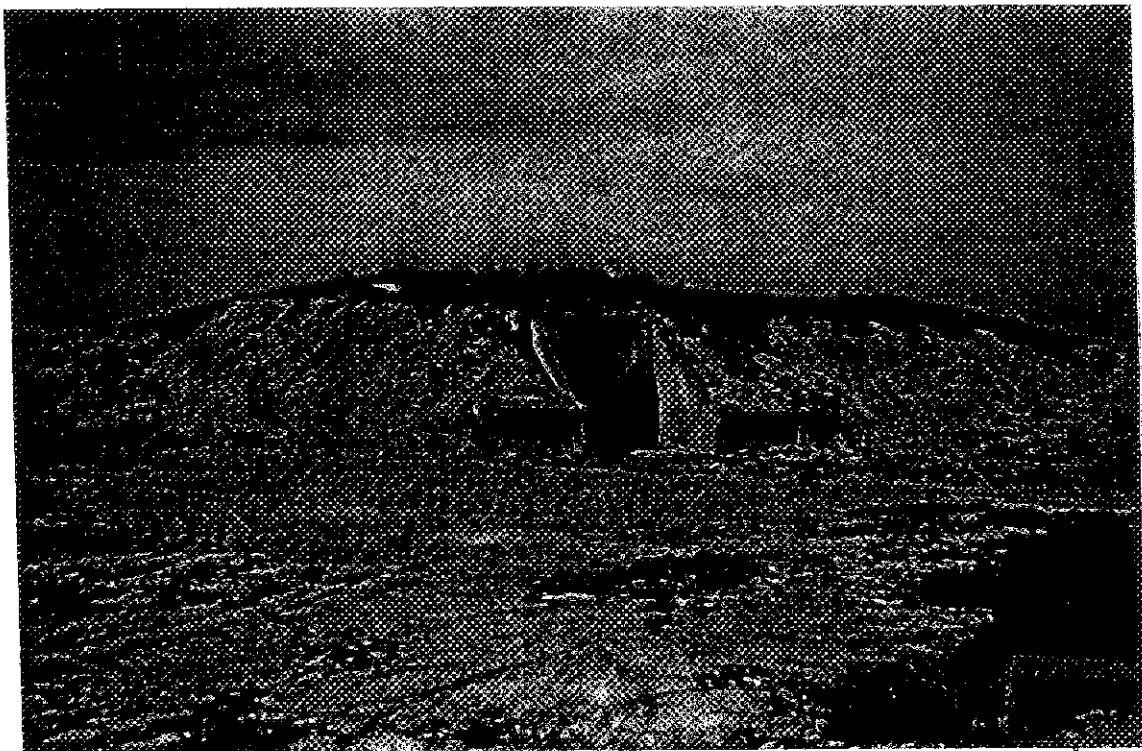
URS CORPORATION


Peter M. Green, AICP
Senior Airport Environmental Planner

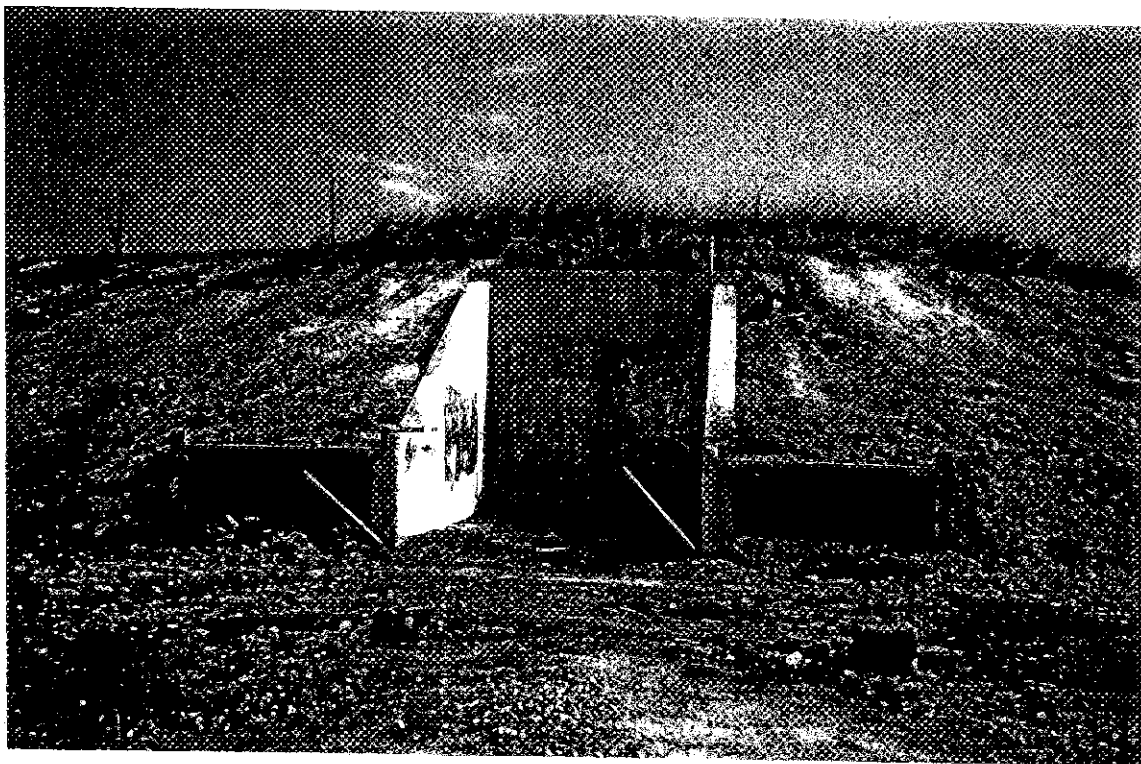
URS Corporation
7650 West Courtney
Campbell Causeway
Tampa, FL 33607-1462
Tel: 813.286.1711
Fax: 813.287.8591



BUNKER EXTERIOR (TYPICAL)

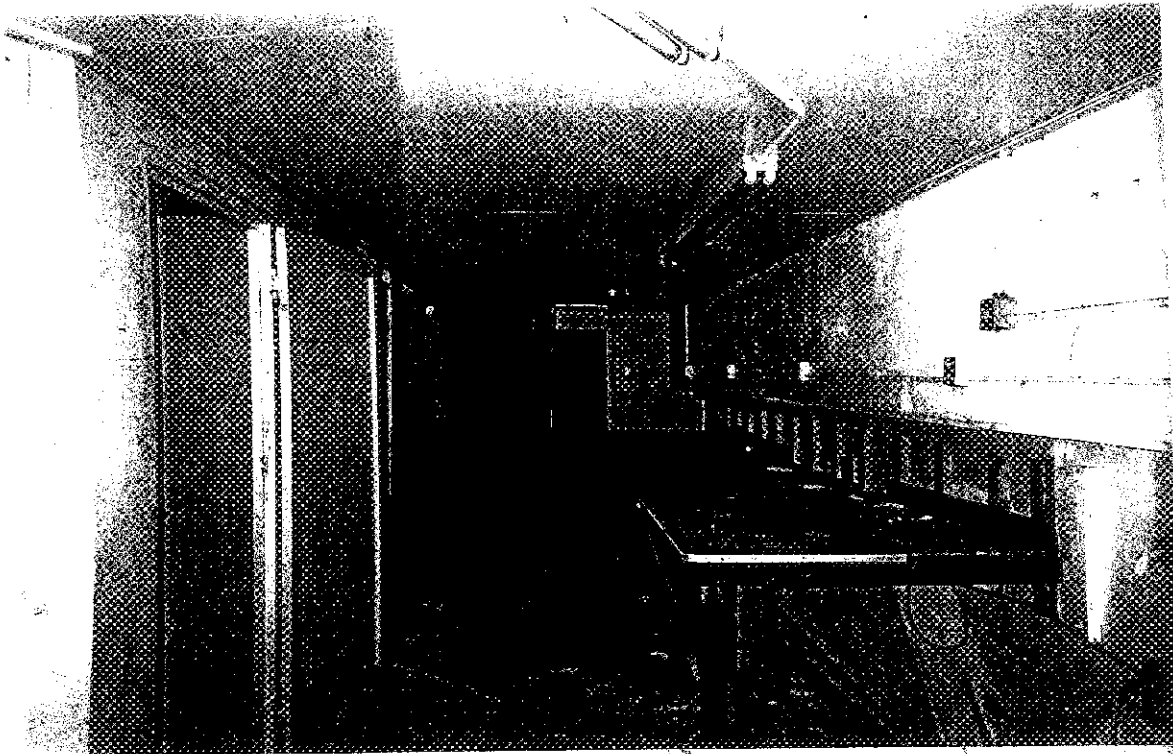


BUNKER EXTERIOR (TYPICAL)



BUNKER ENTRANCES





BUNKER INTERIOR
(TYPICAL)

